



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,309	05/30/2001	Hiroyuki Yamada	MAT-8140US	1614

7590 07/01/2002

RATNER AND PRESTIA
Suite 301
One Westlakes, Berwyn
P.O. Box 980
Valley Forge, PA 19482-0980

EXAMINER

EASTHOM, KARL D

ART UNIT	PAPER NUMBER
----------	--------------

2832

DATE MAILED: 07/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,309

Applicant(s)

Yamada et al.

Examiner

Karl Easthom

Art Unit

2832



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Apr 30, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 2832

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear which element, "electrodes" or "edges", is modified by the phrase "along said longitudinal width" - the "electrodes ...extending...along said longitudinal width" or the "edges of the substrate along said longitudinal width".

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The new limitations lack written description. First, the length, from left to right in Fig. 1, is longer than the width, from top to bottom at Fig. 1, but applicant claims "a substrate having a longitudinal width greater than a length of said substrate". Assuming that applicant means that the length is from top to bottom of Fig. 1, and that the longitudinal width is from left to right, the electrodes do not "extend to opposite edges of said substrate along said longitudinal width". That is, they fall short of the edges. There is no description for the electrodes to extend to opposite edges.

Art Unit: 2832

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

6. Claims 1, 6, 7, 9-11, and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Edwards, Jr. et al. The claimed invention is disclosed at Fig. 1 as prior art of Edwards with S-shape section 24 having side sections at the ends, and electrodes 22. In claim 11, the width of a small section of 24 in Edwards is taken as the distance along the long edge, where applicant appears to claim this distance as a "longitudinal width", so that the S-shape is in the middle having several turns, and the side sections have only ½ turn, so that the "width" is less. In claims 15-16, Edwards shows only a single S in the middle, which is highlighted in the reference, where the side sections are the other portions, and do not have a complete S, as seen.

7. Claims 1-2, 4, 6-7, 9-11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizukoshi et al. Mizukoshi et al. discloses the invention at Figs. 1 and 4 with the S-shape having side sections at the ends, and electrodes 3, 4. In Mizukoshi the width is greater at the ends as seen.

8. Claims 1-2, 6-7, 11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Collins. Collins discloses the invention at Figs. 3 with the S-shape R having side sections at the

Art Unit: 2832

ends, and electrodes 32e, and 31e. In claims 2, 4 and 11, the width of a small section of R is taken as the distance along the long edge, where applicant appears to claim this distance as a "longitudinal width", so that the S-shape is in the middle having several turns, and the side sections have only $\frac{1}{2}$ turn, so that the "width" is less.

9. Claims 11-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Kambara et al. Kambara discloses the claimed invention at Fig. 10. The side sections are 2d'' where there is at least an S section 2a'' between two of said sections, and each section is contemplated to be trimmed (see cut 8a'' - meeting claim 12). Each side section is "coupled" to the electrodes 3, 4 where the whole resistor is electrically coupled thereto. At the point where the line 2d'' ends on the section it points to, one sees that there is "a width" of the side portion (triangular almost), greater than a width of the S shaped section, meeting claim 11. The electrodes extend to the edges at least as far as applicant's Fig. 1, for example..

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-11 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solow in view of Collins. Solow discloses the claimed invention except for electrodes on opposite sides. Fig. 3 of Collins discloses placing the electrodes on the sides in order to form a

Art Unit: 2832

standard chip element. It would have been obvious to form a standard chip element out of the Solow device for the purpose of mounting it on a substrate, known as a "wrap around", as indicated at Col 5. Solow discloses the other elements of the claimed invention at Fig. 1 with electrodes 20, trim cut 40 in a wider rectangular portion (claims 2-3, 5, 8), and resistor 14 comprising an S-shaped section. The rectangular portions at the end appear to be at least twice the thickness of the S-shaped parts - claim 4. In claims 8-9, the rectangular portion 40 of said side sections is trimmed. In claim 7, printing is well known, and it would have been obvious to print where Collins discloses thick film resistors.

12. Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solow in view of Collins, further in view of Coates, Cook, Jr., Johnston, Croset et al., or Jenkins. The claimed invention is disclosed except for only a single S-section. The noted secondary art discloses a single S-section in the middle of the pattern, with the side sections comprising at most $\frac{1}{2}$ S turns on either end. It would have been obvious to vary the length in order to control the resistance where the Examiner takes Official Notice that it is well known that the length of a resistor is proportional to its resistance.

13. Applicant's arguments filed 4/30/02 have been fully considered but they are moot or not persuasive. Applicant argues that the pair of electrodes extending to opposite edges is not disclosed or suggested. First, as noted, there is no disclosure for such an element, since Fig. 1 shows electrodes 12 not extending to any opposite edges. Alternatively, it is disclosed as noted above.

Art Unit: 2832

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl Easthom whose telephone number is (703)308-3306. The examiner can normally be reached on M-Th. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad, can be reached on (703)308-7619. The fax phone number for the organization where this application or proceeding is assigned is (703)308-7722. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


KARL D. EASTHOM
PRIMARY EXAMINER